REMARKS

Claims 1-52 are all the claims pending in the application. Claims 1, 2, 17-21, and 36-40 have been examined and claims 3-16 and 22-35 have been withdrawn from consideration as being drawn to a non-elected invention.

By this Amendment, Applicant amends the specification to indicate that the non-designated output is just a label for the system waste. No new matter is being added. Also, by this Amendment, Applicant amends claims 1, 19, 20, and 38-40.

Finally, Applicant adds claims 41-52. Claims 41-52 are clearly supported throughout the specification. For example, claims 41-46 are supported at least on pages 2, 3, 15, and 16 of the specification, claims 47-51 at least on pages 12-14 of the specification and claim 52 at least on pages 10-11 of the specification. No new matter is being added.

In the Advisory Action dated June 24, 2004, the Examiner maintained all of the rejections. In particular, the Examiner rejected claims 1, 2, 17-21, and 36-40 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description. The Examiner noted in the attached sheet that the term "non-designated output of said system" is not stated anywhere in the specification (see page 2 of the Advisory Action). Applicant herein amends the specification to clarify that the non-designated output is a label for waste. In view of this amendment to the specification, Applicant respectfully submits that claims 1, 2, 17-21, and 36-40 comply with the written description requirement.

Next, the Examiner maintained the prior art rejections. In particular, claims 1, 2, 17-21, and 36-39 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,586,066 to White et al. (hereinafter "White") and claim 40 as being anticipated by U.S. Patent No. 5,655,074 to Rauscher (hereinafter "Rauscher").

In particular, the Examiner appears to concentrate on the examples of the non-designated output, *e.g.*, noise, heat, and alleges that these can be designated outputs. As an example, the Examiner cites an electric blanket which is designed to produce heat (see page 2 of the Advisory Action). Applicant first respectfully points out that these outputs (e.g., heat or noise) are provided as examples only and the non-designated output can comprise of other signals as explained in the specification.

Moreover, claims 1, for example, recites: "non-designated output of said system." In other words, what is the non-designated output or waste depends on the system. Something that is waste for one system could in fact be the designated output of another system.

Perhaps, this point can best be illustrated by way of an example. Consider the electric heater mentioned by the Examiner, heat is the designated output of an electric heater. That is, the function of the electric heater is to produce heat. On the other hand, the function of the computer is to perform calculations. As such, the resulting calculations are the designated output of the computer, whereas heat produced by the computer in performing these calculations is clearly non-designated output. In short, the designated, non-designated output is system specific. As illustrated by the example above, when heat is produced by the electric heater, the heat is the designated output, whereas when heat is produced by a computer, it is clearly the non-designated

output. In other words, something which is a designated output of one system can be a non-designated output of another system.

To further clarify this exemplary aspect, Applicant amends claim 1 to recite: "wherein the disorder indicator represents a non-designated output of said system, and said non-designated output is system waste,...wherein said disorder indicator provides non-specific failure indications."

For example, an illustrative, non-limiting embodiment of the present invention discloses a top down approach for detecting general abnormality or ill defined or unexpected phenomena. That is, in the exemplary embodiment, the system can monitor undefined parameters, the parameters which have no relationship to the designated or intended output of the system. In other words, the system can monitor parameters unrelated to the function for which the system is designed. The system simply attempts to find patterns indicative of fault in the byproducts or waste. Thereby, no detailed knowledge of the system is required. In the exemplary embodiment, the system can be applicable to a variety of devices. This passage is provided by way of an example only and is not intended to limit the scope of the claims in any way.

White only teaches carrying out surveillance of industrial processes with correlated sensor parameters. In particular, White teaches:

> It is typical in the industrial system 14 ***that a substantial degree of cross correlation exists among sensed data from the plurality of sensors 16***. In many industrial processes such cross correlation arises naturally from the physics or chemistry inherent in such systems. For example, if the industrial system 14 involves fluid

> transport, then the flow rate, pressure drops and upstream versus downstream temperatures ***will all have a substantial degree of correlation***. A further example for the industrial system 14 is for rotating machinery wherein the rotation of a shaft will generate a rotational speed signal which ***is highly correlated*** with the power provided to drive the machine motor. Further, both of these variables are usually correlated with radial vibration levels for the machine. If the industrial system 14 includes an array of the sensors 16 deployed to measure the same variable, there can be a high degree of correlation due to the close proximity of the various sensors 16, (col. 3, lines 1 to 17).

That is, White fails to teach or suggest measuring the non-designated output of the system. White teaches monitoring signals from the sensors which are correlated with the output the system was designed to produce. For example, in White, the rotating machinery is designed to rotate and the speed of the rotation is highly relevant to the output this rotating machinery is designed to produce. That is, White clearly fails to teach or suggest defining an unexpected phenomena and implementing the surveillance system without detailed knowledge of the system.

At least in view of the clarified ambiguity, Applicant respectfully submits that claim 1 is patentably distinguishable from White. Claims 2, 17, and 18 are patentable at least by virtue of their dependency on claim 1.

In addition, claims 19 and 20 have been amended to further clarify this exemplary aspect of the invention. Claims 19 and 20 recite features similar to the features argued above with respect to claim 1. Therefore, these arguments are respectfully submitted to apply with equal force here. In view of these similar recitations, Applicant respectfully submits that claims 19 and

20 are clearly patentable over White. Claims 21, 36, and 37 are patentable at least by virtue of their dependency on claim 20.

Next, claim 38 has been amended to further clarify the invention. In particular, claim 38 now recites: "a measurable indicator of a level of disorder in said operative system, wherein said measurable indicator is selected without detailed knowledge of said operative system." White only teaches monitoring surveillance of industrial processes with correlated sensor parameters. In other words, in White, the installed sensors are system specific.

In order to monitor a system in White, the operator must be very familiar with the system so as to install the right sensors. In other words, in White, the system must be carefully studied before the needed sensors are installed. White does not teach or suggest a measurable indicator being selected without detailed knowledge of the system. In other words, the sensors installed and the parameters monitored in the White reference are system specific, and as such detailed knowledge of the system is required. In short, claim 38 is patentably distinguishable from White.

Claims 39 and 40 have been amended to further clarify the invention. Claims 39 and 40 recite features similar to the features argued above with respect to claim 1. Therefore, these arguments are respectfully submitted to apply with equal force here. In view of these similar recitations, Applicant respectfully submits that claims 39 and 40 are clearly patentable over White.

Rauscher is no different from White in that it measures characteristics about a software system, where these characteristics are defined by a user. Both references fail to teach or suggest

using undefined parameters, waste which is not related to the output the system is designed to produce. In short, both, White and Rauscher use the designated output for statistical analysis and cannot now be said to meet the above identified requirements of the independent claims, and would not have rendered unpatentable or anticipated the invention as defined by these claims within the meaning of 35 U.S.C. § 102. For all of the foregoing reasons, therefore, Applicant respectfully submits that claims 1, 2, 17-21, and 36-40 are patentably distinguishable from White and from Rauscher.

Entry and consideration of this Amendment is respectfully requested.

Respectfully submitted,

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